

CLAIMS

What is claimed is:

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1. A method for substituting parameters of a field in a display screen area, comprising the steps of:
 - (a) displaying a first field parameter within the field of the display screen area;
 - (b) receiving an indication that the first field parameter has been changed to a second field parameter;
 - (c) responsive to the indication that the first field parameter has been changed to the second field parameter, creating a link between the first field parameter and the second field parameter for each occurrence of the first field parameter; and
 - (d) responsive to the link between the first field parameter and the second field parameter, displaying the second field parameter in the place of the first field parameter within the field of the display screen area.

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2. The method of Claim 1, further comprising the steps of:

5 receiving an indication that the second field parameter has been changed to a third field parameter;

10 in response to the indication that the second field parameter has been changed to the third field parameter, eliminating the link between the first field parameter and the second field parameter and creating a link between the first field parameter and the third field parameter for each occurrence of the first field parameter;

15 if the first field parameter is not the same as the third field parameter, then responding to the link between the first field parameter and the third field parameter by displaying the third field parameter in the place of the first field parameter within the field of the display screen area; and

20 if the first field parameter is the same as the third field parameter, then eliminating the link between the first field parameter and the third field parameter, eliminating the third field parameter, and displaying the first field parameter within the field of the display screen area.

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3. The method of Claim 2, wherein the field of the display screen area is a payee name field, the first field parameter is an original payee name, the second field parameter is a prior preferred payee name, and third field parameter is a preferred payee name.

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4. A method for managing a link between field parameters within a field for a transaction, wherein said link connects only two field parameters at a time, and thereafter displaying one of said field parameters based on the creation or elimination of said link, comprising the steps of:

(a) changing a first field parameter to a third field parameter within said field;

(b) if said first field parameter does not have a link to said second field parameter, then creating a link from said first field parameter to said third field parameter, and displaying said third field parameter;

(c) if said first field parameter has said link to said second field parameter, then eliminating said link from said first field parameter to said second field parameter, and creating said link from said first field parameter to said third field parameter;

(d) if said first field parameter is not the same as said third field parameter, then displaying said third field parameter; and

(e) if said first field parameter is the same as said third field parameter, then eliminating said link from said first field parameter to said third field parameter, deleting said third field parameter, and displaying said first field parameter.

5. The method of Claim 4, wherein said field is a payee name field and wherein said first, second, and third field parameters are payee names.

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6. The method of Claim 4 further comprising the step of storing said first field parameter in a dummy field of a dummy table having multiple dummy fields, before creating said link from said first field parameter to said third field parameter, wherein said dummy table contains said first field parameter that is linked to said second or third field parameter.

10 The method of Claim 4, wherein said steps of displaying one of said field parameters comprise the steps of: making a first determination as to whether said first field parameter is located in a dummy table containing dummy fields;

15 if said first field parameter is located in said dummy table, then making a second determination as to whether said first field parameter in said dummy table has a flag indicating that said link between said first field parameter and said third field parameter is present;

20 if said first field parameter located in said dummy table has said flag, then using said link to point to said third field parameter and displaying said third field parameter;

25 if said first field parameter is not located in said dummy table or said first field parameter is located in said dummy table but does not have said flag, then making a third determination as to whether said first field parameter is located in an active table containing active fields;

30 if said first field parameter is located in said active table, then displaying said first field parameter; and

 if said first field parameter is not located in said active table, then displaying said first field parameter before adding said first field parameter to said active table.

8. A computer system for managing a link between field parameters within a field for a transaction having multiple fields, wherein said link connects only two field parameters at a time, and thereafter displaying one of said field parameters based on the creation or elimination of said link, comprising:

a processing unit (PU);

an input device connected to said PU;

a memory storage device for storing a

10 program module; and

a display device, coupled to said PU, for displaying said field parameters;

(a) display said transaction;

(b) select at least one field in said transaction;

(c) change a first field parameter to a third field parameter within said selected field;

20 (d) make a determination as to whether said first field parameter has said link to a second field parameter within said selected field;

25 parameter in a dummy field of a dummy table having multiple
dummy fields, wherein said dummy table contains said first
field parameter that is linked to said second or third field
parameter, create said link from said first field parameter to
said third field parameter, and display said third field
parameter:

(f) if said first field parameter has said link to said second field parameter, then eliminate said link from said first field parameter to said second field parameter, and create

5 said link from said first field parameter to said third field parameter;

10 (g) make a determination as to whether said first field parameter is the same as said third field parameter;

15 (h) if said first field parameter is not the same as said third field parameter, then display said third field parameter; and

20 (i) if said first field parameter is the same as said third field parameter, then eliminate said link from said first field parameter to said third field parameter, delete said third field parameter, and display said first field parameter.

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15 9. The computer system of Claim 8, wherein said instructions being operative to display one of said field parameters comprise the steps of:

20 making a first determination as to whether said first field parameter is located in said dummy table;

25 if said first field parameter is located in said dummy table, then using said link between said first field parameter and said third field parameter to point to said third field parameter and displaying said third field parameter;

30 if said first field parameter is not located in said dummy table, then making a second determination as to whether said first field parameter is located in an active table containing active fields;

if said first field parameter is located in said active table, then displaying said first field parameter; and

if said first field parameter is not located in said active table, then displaying said first field parameter before adding said first field parameter to said active table.

5 10. A computer-readable medium on which is stored a program module for managing a link between a first field parameter and a second field parameter within a field for a transaction, said transaction having multiple fields, and thereafter displaying one of said field parameters based on the creation or elimination of said link, said program module comprising instructions which, when executed by a computer, perform the steps of:

10 (a) displaying said transaction;
15 (b) selecting at least one field in said transaction;
 (c) changing a first field parameter to a third field parameter within said selected field;
 (d) making a determination as to whether said first field parameter has said link to a second field parameter within said selected field;
 (e) if said first field parameter does not have said link to said second field parameter, then storing said first field parameter in a dummy field of a dummy table having multiple dummy fields, wherein said dummy table contains said first field parameter that is linked to said second or third field parameter, creating said link from said first field parameter to said third field parameter, and displaying said third field parameter;
20 (f) if said first field parameter has said link to said second field parameter, then eliminating said link from said first field parameter to said second field parameter, and creating said link from said first field parameter to said third field parameter;
25 (g) making a determination as to whether said first field parameter is the same as said third field parameter;
 (h) if said first field parameter is not the same as said third field parameter, then displaying said third field parameter; and

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5 (g) if said first field parameter is the same as said third field parameter, then eliminating said link from said first field parameter to said third field parameter, deleting said third field parameter, and displaying said first field parameter; and

10 wherein said steps of displaying one of said field parameters, include

15 making a first determination as to whether said first field parameter is located in said dummy table;

20 if said first field parameter is located in said dummy table, then making a second determination as to whether said first field parameter in said dummy table has a flag indicating that said link between said first field parameter and said third field parameter is present;

25 if said first field parameter located in said dummy table has said flag, then using said link to point to said third field parameter and displaying said third field parameter;

30 if said first field parameter is not located in said dummy table or said first field parameter is located in said dummy table but does not have said flag, then making a third determination as to whether said first field parameter is located in an active table containing active fields;

if said first field parameter is located in said active table, then displaying said first field parameter; and

if said first field parameter is not located in said active table, then displaying said first field parameter before adding said first field parameter to said active table.

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11. A method for reconciling an ending balance in a personal data store with an on-line financial statement by correcting an opening balance in the personal data store, comprising the steps of:

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(a) displaying said personal data store containing said opening balance, a plurality of transactions organized by date, and said ending balance;

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(b) downloading said on-line financial statement containing a plurality of transactions organized by date, an ending period, and an ending balance;

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(c) comparing the earliest dated transaction in said personal data store to the earliest dated transaction in said on-line financial statement to determine whether the earliest dated transaction in said personal data store is later than the earliest dated transaction in said on-line financial statement;

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(d) if the earliest dated transaction in said personal data store is not later than the earliest dated transaction in said on-line financial statement, then determining whether any of said transactions of said on-line financial statement have been downloaded into said personal data store;

(e) if none of said transactions of said on-line financial statement have been downloaded into said personal data store, then calculating a correct opening balance that is different from said opening balance in said personal data store; and

(f) displaying said correct opening balance.

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12. The method of Claim 11, wherein said step of calculating said correct opening balance of said personal data store is determined by subtracting the sum of all said transactions in said on-line financial statement from said ending balance in said on-line financial statement.

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~~13. The method of Claim 11 further comprising the step of displaying a prompt indicating that said opening balance has changed to said correct opening balance in said personal data store.~~

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14. The method of Claim 11, wherein said step of determining whether any of said transactions of said on-line financial statement have been downloaded into said personal data store comprises the steps of:

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comparing said ending balance in said on-line financial statement to said transactions in said personal data store to determine whether any transaction date in said personal data store is the same as said ending period of said on-line financial statement;

if so, then searching for any said downloaded transaction of said on-line financial statement in said personal data store from the transaction in said personal data store having the same date as said ending period of said on-line financial statement backward to said earliest dated transaction in said personal data store; and

if none of the transaction dates in said personal data store are the same as said ending period of said on-line financial statement, then locating the closest transaction date in said personal data store that occurs before said ending period of said on-line financial statement and searching for any of said downloaded transactions of said on-line financial statement in said personal data store from said closest transaction date in said personal data store backward to said earliest dated transaction in said personal data store.

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15. The method of Claim 14, wherein said downloaded transaction of said on-line financial statement is designated by a flag to indicate which said transaction of said plurality of transactions in said personal data store has been downloaded from said on-line financial statement.

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16. A computer system for reconciling an ending balance in a personal data store containing an opening balance, a plurality of transactions organized by date, and said ending balance with an on-line financial statement by correcting said opening balance in the personal data store comprising:

5 a processing unit (PU);

10 an input device connected to said PU;

15 a memory storage device for storing a program module; and

20 a display device, coupled to said PU, for displaying said opening balance;

25 said PU, responsive to instructions from said program module running on said computer system, being operative to:

30 (a) download into said memory storage device said on-line financial statement containing a plurality of transactions organized by date, an ending period, and an ending balance;

35 (b) compare the earliest dated transaction in said personal data store to the earliest dated transaction in said on-line financial statement to determine whether the earliest dated transaction in said personal data store is later than the earliest dated transaction in said on-line financial statement;

40 (c) if the earliest dated transaction in said personal data store is not later than the earliest dated transaction in said on-line financial statement, then determine whether any of said transactions of said on-line financial statement have been downloaded into said personal data store; and

45 (d) otherwise, calculate a correct opening balance that is different from said opening balance in said personal data store by subtracting the sum of all said transactions in

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1 said on-line financial statement from said ending balance in
said on-line financial statement.

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17. The computer system of Claim 16, wherein said
instructions being further operative to display said correct
opening balance on said display device and display a prompt
indicating that said opening balance has changed to said
correct opening balance in said personal data store on said
display device.

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5 18. The computer system of Claim 16, wherein said instructions being operative to determine whether any of said transactions of said on-line financial statement have been downloaded into said personal data store, comprise the steps of:

10 comparing said ending balance in said on-line financial statement to said transactions in said personal data store to determine whether any transaction date in said personal data store is the same as said ending period of said on-line financial statement;

15 if so, then searching for any said downloaded transaction of said on-line financial statement in said personal data store from the transaction in said personal data store having the same date as said ending period of said on-line financial statement backward to said earliest dated transaction in said personal data store; and

20 if none of the transaction dates in said personal data store are the same as said ending period of said on-line financial statement, then locating the closest transaction date in said personal data store that occurs before said ending period of said on-line financial statement and searching for any of said downloaded transactions of said on-line financial statement in said personal data store from said closest transaction date in said personal data store backward to said earliest dated transaction in said personal data store.

25 19. The computer system of Claim 18, wherein said downloaded transaction of said on-line financial statement is designated by a flag to indicate which said transaction of said plurality of transactions in said personal data store has been downloaded from said on-line financial statement.

20. A computer-readable medium on which is stored a program module for reconciling an ending balance in a personal data store with an on-line financial statement by correcting an opening balance in the personal data store, said program module comprising instructions which, when executed by a computer, perform the steps of:

(a) displaying said personal data store containing said opening balance, a plurality of transactions organized by date, and said ending balance;

(b) downloading said on-line financial statement containing a plurality of transactions organized by date, an ending period, and an ending balance;

(c) comparing the earliest dated transaction in said personal data store to the earliest dated transaction in said on-line financial statement to determine whether the earliest dated transaction in said personal data store is later than the earliest dated transaction in said on-line financial statement;

(d) if the earliest dated transaction in said personal data store is not later than the earliest dated transaction in said on-line financial statement, then determining whether any of said transactions of said on-line financial statement have been downloaded into said personal data store, wherein said downloaded transaction of said on-line financial statement is designated by a flag to indicate which said transaction of said plurality of transactions in said personal data store has been downloaded from said on-line financial statement;

(e) otherwise, calculating a correct opening balance that is different from said opening balance in said personal data store by subtracting the sum of all said transactions in said on-line financial statement from said ending balance in said on-line financial statement; and

(f) displaying said correct opening balance.

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21. A data structure for managing the display of a first field parameter or a second field parameter on a display device, comprising:

5 a dummy table located in said data structure, said dummy table containing a plurality of field parameters, wherein at least two said field parameters are linked together with a link;

10 wherein a first determination is made as to whether said first field parameter is located in said dummy table;

15 wherein if said first field parameter is located in said dummy table, then a second determination is made as to whether said first field parameter in said dummy table has said link, wherein said link is located between said first field parameter and said second field parameter;

20 wherein if said first field parameter located in said dummy table has said link, then said link is used to point to said second field parameter and said second field parameter is provided for display on said display device;

25 wherein if said first field parameter is not located in said dummy payee table or said first field parameter is located in said dummy table but does not have said link between said first field parameter and said second field parameter, then a third determination is made as to whether said first field parameter is located in an active table located in said data structure, said active table containing a plurality of field parameters;

30 wherein if said first field parameter is located in said active table, then said first field parameter is provided for display on said display device; and

wherein if said first field parameter is not located in said active table, then said first field parameter is added to said active table before said first field parameter is provided for display on said display device.

22. A method for automatically correcting payee names, comprising the steps of:

(a) downloading an on-line financial statement comprising original payee names from an on-line banking service;

(b) determining that a first one of the original payee names has been changed to a substitute payee name; and

(c) responsive to determining that the first payee name has been changed to the substitute payee name, replacing the first payee name with the substitute payee name and displaying the substitute payee name within a payee field of a display screen for each occurrence of the first payee name.

23. The method of Claim 22, wherein the step of determining that the first payee name has been changed to a substitute payee name comprises receiving an indication that the first payee name has been changed to the substitute payee name based on a link between the first payee name and the substitute payee name for each occurrence of the first payee name.

24. The method of Claim 23, wherein the step of replacing the first payee name with the substitute payee name comprises displaying the substitute payee name in the place of the first payee name within the payee field in response to the link pointing to the substitute payee name from each occurrence of the first payee name.

25. The method of Claim 22, further comprising the steps of:

in response to an indication that the substitute payee name has been changed to the preferred payee name, eliminating the link between the first payee name and the substitute payee name;

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creating a link between the first payee name and the preferred payee name for each occurrence of the first payee name;

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determining whether the first payee name is the same as the preferred payee name;

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if the first payee name is not the same as the preferred payee name, then responding to the link between the first payee name and the preferred payee name by displaying the preferred payee name in the place of the first payee name within the payee field; and

if the first payee name is the same as the preferred payee name, then eliminating the link between the first payee name and the preferred payee name, eliminating the preferred payee name, and displaying the first payee name within the payee field.

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